Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Pre-AP Biology: Unit 3, DBA #1 Review**

Ms. OK, 2014-2015

**Objectives Assessed:** Topic 1 (Cell Theory), Learning Target A-B

***Practice Questions:*** *Answer the following questions thoroughly and accurately in preparation for your Daily Biology Assessment.*

1. Identify the cell theory scientist who could have made each of the following statements.

A. “OMG, cork has many tiny chambers… I’mma call them cells!” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B. “OMG, elm leaves are made of cells!” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C. “OMG, jellyfish are made of cells!” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

D. “OMG, there are all these little floating things in pond water! I think they might be single-celled organisms. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E. “OMG, I saw a cell split to make two cells! I think that’s how they reproduce!” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which of the following statements are and are not part of the cell theory? Put a “Y” for yes and a “N” for no.

A. All cells are the same size. \_\_\_\_\_

B. All cells are the same shape. \_\_\_\_\_

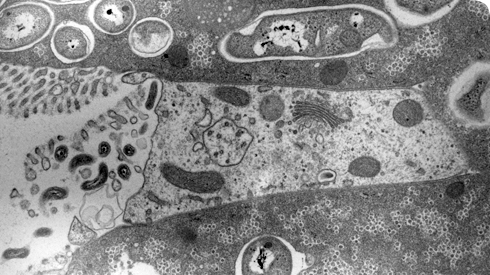
C. All living things are made of cells. \_\_\_\_\_

D. Cells are the basic unit of structure and function in living things. \_\_\_\_\_

E. All organisms have many cells. \_\_\_\_\_

F. All cells come from pre-existing cells. \_\_\_\_\_

3. Which image below was taken by a Transmission Electron Microscope (TEM), and which image was taken by a Scanning Electron Microscope (SEM)?

4. A cell is very large and contains a structure that houses its DNA. What type of cell is this—prokaryotic or eukaryotic—and how do you know?

5. Give two examples of specialized cells in a plant and their functions… Hint: think about the different parts of a plant!

6. A student plans to conduct an experiment to test the effect of adding glucose to a petri dish containing *E. coli* bacteria. He made the following prediction… “If I add glucose to a petri dish containing *E. coli* bacteria, then it will increase the rate of population growth in the bacteria.” Is this an example of a hypothesis or theory? Explain your answer.